

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No.: M004324 **OFFICE:** Engineering Services
Bartow & Gordon Counties
I-75 Milling & Inlay Resurfacing **DATE:** January 5, 2012

FROM: Ronald E. Wishon, State Project Review Engineer *REW*

TO: Eric Pitts, State Maintenance Engineer
Attn.: E. Reid Mathews


SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held December 13, 2011. Responses were received on January 4, 2012. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
Asphalt Paving - Mainline				
AM-1	Reduce milling and SMA inlay from 2 inches to 1.5 inches on mainline and ramps	\$3,240,000	No	On previous projects, it has been advantageous to mill the recommended 2 inch depth to replace the entire existing 2 inch SMA course. This will provide a longer life for the roadway resurfacing.
AM-2	Reduce PEM overlap on shoulders	\$175,000	No	Leaving the proposed widths will match the existing widths of the overlap material leading into the project and exiting the project.
Asphalt Paving - Shoulder				
AS-1	Eliminate milling and Superpave inlay on shoulders	\$6,000,000	No	Because AS-2 will be implemented, AS-1 cannot be done.
AS-2	Reduce milling and Superpave inlay from 2 inches to 1.5 inches on shoulders	Proposed = \$1,362,000 Actual = \$484,634	Yes	The depth of the shoulder milling and inlay of Superpave material will be reduced to 1.5 inches. The Project Manager has provided calculations to support the revised savings.

Traffic Control				
C-1	Allow weekend daytime work hours	\$640,000	Yes	Work hours will be implemented to allow for weekend work hours ranging from 7:00 pm Friday until 6:00 am Monday. The work hours for the week days shall remain as 7:00 pm until 6:00 am Monday through Friday.
C-10	Use orange protective fencing to delineate the Environmentally Sensitive Area (ESA)	Cost increase (\$5,300)	No	The proposed mowing area is large enough to protect the ESA.
Milling				
B-1	Use separate items for milling	\$0	No	It is the policy of Contract Bidding Administration to use one pay item, variable depth, for milling. The plans signify the different depths and locations for the contractor to determine a bid price. If multiple pay items were used, and the actual milling depth exceeded the depth of the deepest pay item, a Supplemental Agreement would be needed. By using one variable depth pay item, a Supplemental Agreement can be avoided.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:  Date: 1/9/12
Gerald M. Ross, PE, Chief Engineer

REW/LLM
Attachments

c: Russell McMurry
Eric Pitts/ Rachel Brown/Reid Mathews/Jimmy Witherow
Patrick Bowers/Kenny Beckworth
Ken Werho/Nabil Raad
Lisa Myers
Matt Sanders

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. M004324 Bartow/Gordon counties **OFFICE:** Maintenance
Resurfacing of SR 401 (I-75) **DATE:** January 3, 2012

FROM: *EP/ERM*
Eric Pitts, State Maintenance Engineer,
E. Reid Mathews, Maintenance Design Manager

TO: Ronald E. Wishon, State Project Review Engineer
Attn.: Lisa Myers

SUBJECT: RESPONSE TO VALUE ENGINEERING STUDY ALTERNATIVES

Attached are the responses for the Value Engineering Study. This office concurs with the responses.

If you have any questions, please contact E. Reid Mathews, Project Manager at 404-631-1391

EP:erm
c: Russell McMurry

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

1) AM-1: Reduce the mainline and ramp milling and SMA inlay depth.
VE Team Savings: \$3,240,000.00

No, will not implement. From previous projects, it has been advantageous to mill the recommended 2 inch depth to replace the original 2 inch SMA course. This will provide a better result in the life of the roadway resurfacing.

2) AM-2: Reduce the PEM shoulder overlap.
VE Team Savings: \$175,000.00

No, will not implement. Leaving at the recommended widths in the plans will match the existing widths of existing overlap of the material leading into the project and exiting the project.

3) AS-1: Eliminate the shoulder milling and Superpave inlay.
VE Team Savings: \$6,000,000.00

No, will not implement – Because we are implementing AS-2. Only one of the recommendations can be implemented.

4) AS-2: Reduce the shoulder milling and Superpave inlay depth.
VE Team Savings: \$1,362,000.00

Yes, will implement. The depth of the shoulder milling and inlay of Superpave asphaltic material shall be revised from 2 inch depth to 1.5 inch depth.

Revised savings: \$484,633.65 See calculations below:

Total shoulder area to be milled and resurfaced on mainline = 560985 square yards

Asphalt quantities for this area
 $(560985 \text{ sy})(165 \text{ lbs/sy})/2000 \text{ lbs/ton} = 46280 \text{ tons}$
Estimated cost of asphalt
 $(46280 \text{ tons})(71.22) = \$3,296,061.60$

Original estimate using 2 inch milling depth and resurfacing at 220 lbs/sy = \$3,780,665.25

Total estimated saving = \$484,633.65

5) C-1: Allow weekend daytime work and lane closings

Yes, will implement. Work hours will be implemented to allow for weekend work hours ranging from 7:00 p.m., Friday till 6:00 a.m., Monday. The work hours for the week days shall remain as 7:00 p.m. till 6:00 a.m. Monday evening through Friday morning.

6) C-10: Use orange protective fence to delineate the ESA.

No, will not implement. Mowing area is at a wide enough area to protect the ESA.

7) B-1; Design Consideration: Use separate items for milling.

It is the policy of Contract Bidding in GDOT to use one Pay Item, variable depth, for millings. The plans signify the different depths and locations for the contractor to base his pricing.

PRECONSTRUCTION STATUS REPORT FOR PI:M004324

PROJ ID : M004324		I-75 FROM SR 61/BARTOW TO SR 156/GORDON		MGMT LET DATE : 06/22/2012	
COUNTY : Bartow, Gordon		MPO: Not Urban		MGMT ROW DATE :	
LENGTH (MI) 21.70		TIP #:		PRIORITY CODE: 6154	
PROJ NO.:		MODEL YR :		BASELINE LET DATE: 03/05/2012	
PROJ MGR: Mathews, Reid		TYPE WORK: Resurface & Maintenance		SCHED LET DATE : 3/9/2012	
AOHD Initials:		CONCEPT: Maintenance		WHO LETS?: GDOT Let	
OFFICE :		PROG TYPE: N		LET WITH :	
CONSULTANT:		Prov. for ITS:			
SPONSOR : GDOT		BOND PROJ :			
DESIGN FIRM:					

BASE		LATE		LATE		TASKS		ACTUAL		ACTUAL		PROGRAMMED FUNDS		STIP AMOUNTS					
START	FINISH	START	FINISH	START	FINISH			START	FINISH	START	FINISH	Activity	Approved	Proposed	Cost	Fund	Activity	Cost	Fund
7/4/2011	12/2/2011		2/10/2012		2/10/2012	Value Engineering Study		10/14/2011	9/23/2011	77		MCST	LUMP	LUMP	33,785,535.64	L010	MPE	0.00	L010
8/22/2011	1/6/2012		2/14/2012		2/14/2012	Environmental Approval		7/23/2011		100		MPE	2012	2012	15,000.00	L010	MCST	0.00	L010
2/8/2012	2/8/2012		2/22/2012		2/22/2012	FFPR Inspection				0									
2/16/2012	2/29/2012					Submit FFPR Responses (OES)				0									

Bridge: NO BRIDGE REQUIRED		District Comments	
EIS: PCE approved 9/23/11 Certified Let 11/29/11 Pugh 11.29.11			
LGPA: NOT APPLICABLE			
Programming: PE LS 0006148/ADDED PE PHASE FOR VE STUDY 10-19-2011			
Utility: Need plans 8-25-11			
Engr Services: VE Study scheduled Dec. 13, 2011			

Prel. Parcel CT:	Total Parcel in ROW System:	Cond. Filed:	Acquired by: N/R	DEEDS CT:
Under Review:	Options - Pending:	Relocations:	Acquisition MGR:	
Released:	Condemnations- Pend:	Acquired:	R/W Cert Date: 12/15/11	